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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/761,253

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Zhenhua Wang

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5183

7590

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EXAMINER

TRAN, TOAN V

ART UNIT

PAPER NUMBER

2816

DATE MAILED: 06/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/761,253

Applicant(s)

WANG, ZHENHUA

Examiner

Toan Tran

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 9, 10, 12 and 13 is/are rejected.
- 7) ☒ Claim(s) 3-7, 11 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 9 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9 is indefinite because of the phrase "as far as depending on claim 7".

That is because claim 9 does not depend from claim 7 (note that claim 9 depends from claim 8, which depends from claim 1 only).

Claim 15 is indefinite because claim 15 depends from many claims that don't have antecedent basis for "the second reference current source."

### ***Claim Objections***

3. Claim 15 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim (claim 13 is a multiple dependent claim). See MPEP § 608.01(n). Accordingly, the claim 15 has not been further treated on the merits.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 10, 12, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Burstein et al. (US Patent 5,847,586).

Regarding claim 1, Burstein discloses in Fig. 2 a voltage level monitoring circuit comprising: a first reference current source (box 1); a monitoring current source (box 2) derived from a voltage to be measured (VDD); a comparator device (node POR) receiving the two currents and generating an output when one current is less or more than the other (note that in this case, the two “inputs” recited in the claim are connected together, like Fig. 2 of the present invention).

Regarding claim 2, the first reference current source (box 1) comprises a PMOS transistor (p2) whose source connected to the voltage to be measured (VDD); drain connected to the comparator device; and gate receiving a bias voltage (at node 106).

Regarding claim 10, the monitoring current source (box 2) comprises: primary current source (p3), secondary current source (n2, n3); and a processing sensitive resistor (n4, p4).

Regarding claim 12, the secondary current source (n2, n3) is a first NMOS transistor (n2) and second NMOS transistor (n3) connected as recited in the claim.

Regarding claim 13, the processing sensitive resistor comprises a PMOS transistor (p4) connected as recited in the claim.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burstein (the patent above).

Regarding claim 8, Fig. 7 of Burstein further discloses a delay circuit (box 7) having two inverters (p13, n11, 300) connected to the output of the boxes 5 and 6, which are equivalent to boxes 1 and 2 in Fig. 2. These two inverters are to increase the pulse width of the POR to a desired value (see column 8, lines 34-37). It would have been obvious for one of ordinary skill in the art to add the delay circuit (7) with two inverters to the output POR of Fig. 2 for the same advantage.

***Allowable Subject Matter***

8. Claims 3-7, 11, and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claim 9 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

**Conclusion**

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References are cited as of interest because they show some circuits for comparing two current sources, analogous to the claimed invention.

Note that some claims, such as claim 1, are so broad that they read on all of the cited references under 35 USC 102(b) or (e). For example, Garverick (Patent 5,319,255) shows in the front page figure a circuit having: a reference current source (122, 118, 120); a monitoring current source (124-128); and comparator device (110-116).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan Tran whose telephone number is (703) 308-4866. The examiner can normally be reached on 8:30am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on (703) 308-4876. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Toan Tran  
Primary Examiner  
Art Unit 2816

TT  
June 1, 2002